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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,511	03/10/2004	Len D. Twetan	P-20909.00	4248
27581	7590	09/13/2006	EXAMINER	
MEDTRONIC, INC. 710 MEDTRONIC PARK MINNEAPOLIS, MN 55432-9924			MALAMUD, DEBORAH LESLIE	
			ART UNIT	PAPER NUMBER
			3766	

DATE MAILED: 09/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/797,511	<b>Applicant(s)</b> TWETAN ET AL.	
	<b>Examiner</b> Deborah Malamud	<b>Art Unit</b> 3766	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. The examiner acknowledges the amendments received 29 June 2006. Claims 1-40 are pending.

#### ***Drawings***

2. In view of the replacement drawing sheets provided by the applicant, the examiner withdraws the objection to the drawings.

#### ***Double Patenting***

3. The examiner acknowledges the decision of the applicant to address double patenting issues at a later time. The provisional rejection of claims 1-3 and 5-14 under 35 U.S.C. 101 as claiming the same invention as that of claims 1-3 and 5-14 of copending Application No. 11/097,682 is maintained.

#### ***Response to Amendment***

4. The Declarations under 37 CFR 1.131 antedating a reference, and the confidential presentation portions filed on 29 June 2006 have been considered but are ineffective to overcome the Rawat et al (U.S. 2005/0134520) reference. The evidence submitted is insufficient to establish diligence from a date prior to the date of reduction to practice of the Rawat reference to either a constructive reduction to practice or an actual reduction to practice. The affidavit merely states that the presentation was

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created prior to 22 December 2003, and gives no evidence of preparation of the application before that date.

5. Therefore the rejection under 35 USC 102(e) of claims 1-4, 6-8 and 10-11 as being anticipated by Rawat is maintained.

***Claim Rejections - 35 USC § 102***

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1-4, 6-8 and 10-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Rawat. For a discussion of each of the claim elements, see the Non-Final Office Action dated 31 March 2006.

8. In view of the amendments to claim 15, the examiner withdraws the rejection under 35 U.S.C. 102(b) of claims 15-18, 21-29, 31, 33 and 35 as being anticipated by Haussler et al (U.S. 2002/0105467).

***Claim Rejections - 35 USC § 103***

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Claims 5, 9 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rawat et al (U.S. 2005/0134520). For a discussion of each of the claim elements, see the Non-Final Office Action dated 31 March 2006.

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11. Claims 15-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rawat et al (U.S. 2005/0134520) in view of Haussler et al (U.S. 2002/0105467).

Rawat discloses, (par. 0007; Figure 1) "a radio frequency antenna assembly is disposed in a connector header of an implantable medical device. The connector header, also referred to as a header, is fabricated of an insulating material and the antenna assembly is fabricated of conductive material." Rawat discloses the claimed invention except for a serpentine portion disposed between and forming a generally continuous antenna path between the proximal end section and the distal end, the serpentine portion including a plurality of first antenna segments interconnected in an alternating end-to-end configuration by a plurality of second antenna segments.

Haussler however discloses, (par. 0005; Figure 4) "a surface mount chip antenna for a wireless communications device" that "includes a conductive trace having two or more leads that are soldered to the circuit board of the device. The main lead is soldered to the feed from the transceiver circuit and the other leads are soldered to the ground plane. The conductive trace forms a serpentine pattern parallel to the circuit board creating a radiating element." The examiner considers this to be a telemetry antenna comprising a proximal end section having an antenna connector, a distal end opposite the proximal end section and a serpentine portion disposed between the proximal and distal end sections. Rawat and Haussler both disclose antennas with at least a serpentine portion. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Rawat's implantable device header with

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Haussler's serpentine antenna in order to provide a smooth signal to and from the implantable device, with less interference.

12. Regarding claim 16, the examiner considers the element 24 of Haussler's Figure 4 to illustrate first antenna segments that are generally linear in at least one dimension, and second antenna segments that are arcuate.

Regarding claim 17, the examiner considers that the length of the first antenna segment illustrated as element 24 in Haussler's Figure 4 is greater than a length of the second antenna segment.

Regarding claim 18, Haussler discloses, (par. 0020) "trace (24) preferably has a serpentine configuration having a plurality of parallel elements (26)." The examiner considers this to teach the first antenna segments are generally parallel to one another.

Regarding claims 19-20 and 38, Haussler discloses the claimed invention but does not disclose expressly the pitch of the serpentine portion of the antenna. In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. Therefore, it would have been an obvious matter of design choice to modify the serpentine portion of the antenna to obtain the invention as specified in the claims.

Regarding claims 21-23, the examiner considers the view of the trace shown in Haussler's Figure 5 to illustrate a telemetry antenna comprised of a plurality of serpentine portions that are interconnected. The interconnecting segment could be described both as generally linear in at least one direction and curvilinear.

Regarding claims 24-26, the examiner considers that the system inherently has a distal segment interconnecting the serpentine portion and the distal end. According to Haussler's Figure 5, this segment could be described both as generally linear in at least one direction and also curvilinear.

Regarding claim 27, the examiner considers Haussler's system to inherently contain a serpentine portion formed from a substrate having a cross sectional width defining a major planar profile and a cross-sectional height defining a product length planar profile and a product width planar profile. See Figures 4-6.

Regarding claims 30, 32, 34 and 36, Haussler discloses the claimed invention but does not disclose expressly the at least a portion of the antenna with a curvilinear configuration in the product length planar profile and in the product width planar profile.

It would have been an obvious matter of design choice to a person of ordinary skill in the art to modify the length and width of the antenna as taught by Haussler, with at least a portion being curvilinear, because the applicant has not disclosed the curvilinear width or length provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected the applicant's invention to perform equally well with linear profiles as taught by Haussler,

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because Haussler's invention is capable of communicating data wirelessly, as claimed by the applicant. Therefore, it would have been an obvious matter of design choice to modify the antenna to obtain the invention as specified in the claims.

Regarding claim 37, Haussler discloses the claimed invention except for the titanium substrate. It would have been obvious to one of ordinary skill in the art at the time of the invention to use a titanium substrate, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Regarding claims 39-40, Haussler discloses the claimed invention except for an antenna length of either between 1-10 inches or between 2-3 inches. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide an antenna length of between 1-10 or between 2-3 inches, since it has been held that discovering the optimum or workable range involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

### **Conclusion**

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah Malamud whose telephone number is (571) 272-2106. The examiner can normally be reached on Monday-Friday, 9.00am-5.30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pezzuto can be reached on (571)272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
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